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ABSTRACT

This presentation considers the need to rename and reorganize the traditional paradigm that governs the organization and implementation of undergraduate and graduate teacher education programs. Two particular components of the preparation paradigm--the academic component and the professional preservice component--are given particular attention. The paradigm shift is based on four major assumptions: (1) colleges and universities have served and will continue to serve as the locus for a substantial and very significant portion of teacher preparation; (2) the study of education constitutes a discipline in its own right; (3) teacher education reform and teaching profession restructuring are two very different types of educational reform; and (4) the current era is quite challenging in that a value breakup has occurred regarding teacher preparation, resulting in the possibility of constructing a new, improved paradigm for teacher preparation. (CB)

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TOWARD A PARADIGM SHIFT IN TEACHER EDUCATION  
RENAMING AND REORGANIZING THE KNOWLEDGE BASE

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TOWARD A PARADIGM SHIFT IN TEACHER EDUCATION

RENAMING AND REORGANIZING THE KNOWLEDGE BASE

Norman J. Bauer

November 5, 1987

"The research is unequivocal about the general, overall course work provided for teachers. It remains casual at best and affords a poorly conceived collage of courses across the spectrum of initial preparation and an assembly of disparate content fragments throughout continuing education. The formal offerings lack curricular articulation within and between initial and continuing teacher education, and depth of study is noticeably and consistently absent." (1)

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"Reforming the education of teachers depends upon engaging in the complex work of identifying the knowledge base for competent teaching, and developing the content and strategies whereby it is imparted. Although specialized professional knowledge has been under development for some time - and dramatic strides have been made during the past two decades - an amalgam of intuition, unreflective reactions, and personal dispositions still seem to group the right to teach. Improving teaching requires teachers to act on legitimate professional knowledge, skills, and an ethos of responsibility." (2)

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"... colleges do not have enough to teach their students to justify keeping them four years, probably not even three years." (3)

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Introduction:

This paper is about the undergraduate and graduate preparation provided prospective teachers, and about the need to rename and reorganize the traditional paradigm which governs our thinking about how to organize and implement this preparation. Specifically, my purpose is to emphasize two particular components of the preparation paradigm which guide my thinking, the academic component (A) and the professional-pre-service component (PPS). It will be necessary however, briefly to develop the remainder of the components in the paradigm in order to provide an accurate overview of the paradigm shift which I am advocating.

My thinking is based on four assumptions: (a) that colleges and universities have served, and will continue to serve, as the locus for a substantial and very significant portion of the preparation of prospective teachers; (b) that the study of education, the EDUCOLOGICAL component of the paradigm, constitutes a discipline in its own right with "its own integrity," (4) and that this discipline cannot be dispensed with; (c) that reform of teacher education and the restructuring of the teaching profession in the lower schools ARE VERY DIFFERENT KINDS OF EDUCATIONAL REFORM; and (d) that we live in an exhilarating and challenging era because of the value breakup in our thinking about teacher preparation and the consequent possibility of constructing new improved paradigms to guide our efforts in the teacher preparation process.

#### Recent Reform Proposals

One can detect in the spate of recent teacher reform proposals two sectors in which reform has been proposed, the college-university-based sector, and the school-based sector. Most of the reports have had much to say about each of these levels of schooling. However, where changes have occurred they have occurred largely in the realm of the lower schools. Career ladder plans, both norm-referenced and criterion-referenced (5) have been considered and instituted in a number of states; merit pay (6) with all of its criticisms, flaws and uncertainties is being implemented in a number of communities and states; mentor-teacher plans designed for the induction years, as well as for aid to veteran teachers in need of assistance, based largely on the successful intern, intervention and evaluation plan developed in the Toledo Public Schools (7) have been installed in many systems to improve the transition of neophyte teachers from their collegiate pre-service years to actual classroom environments. Efforts have been made at the state level to make the teaching profession financially attractive by enhancing teachers salaries (8), with one system-wide contract recently enacted which provides for salaries of up to \$68,500 for 'lead teachers' in classrooms.

(9) Clearly these salary moves will be likely to induce more persons to consider teaching as a worthwhile career choice. In addition, many school districts are recognizing the competence of their teachers in terms of curriculum decision-making and are increasingly including them in the curricular decision-making process. Some refer to this as the 'empowerment of teachers' (10) power, that is, to change the structure and implementation of significant segments of our elementary and secondary schools.

These and other changes can leave little doubt in the mind of anyone that substantive structural, remunerative, supervisory and evaluative restructuring has begun to occur in our elementary and secondary public schools. Can the same be said about the college and university domain of teacher education?

Responses to this query may be derived from the suggestions for modification of campus-based teacher preparation proffered by various influential organizations and individual thinkers. Both Holmes and Carnegie propose extending teacher preparation programs into a post-baccalaureate program (11), eliminating undergraduate teacher preparation programs, with special emphasis on doing away with the elementary education major. Further, the Carnegie plan specifically advocates the adoption of a policy which would "require a bachelors degree in the arts and sciences as a prerequisite for the professional study of teaching (12). Schlechty (13) suggests that teacher preparation be transferred from universities and colleges to public school systems. The Chief State School Officers of our nation have actively fought for the elimination of education requirements for teachers (14). A speaker at the 1987 conference of the Society of Scholars and Educators suggested that we would have to begin looking for new positions for the many education faculty who will soon be without jobs (15). Others have suggested that we automatically certify all arts and science majors to teach (16), a suggestion which raises once again the age-old specter which argues that one who knows something can teach that something effectively.

One can see, as McCaleb et. al. have argued, that "giving up on schools of education, critics (are calling) for the elimination of traditional university-based teacher education programs." (17) One cannot help getting the feeling at times that panic, deep emotional uncertainty, comparable to the recent panic we witnessed on Wall Street, is affecting the thinking of many involved with teacher preparation in our universities and colleges. Clearly the time is ripe for us to reconsider the nature of the traditional paradigm of teacher preparation lest we throw out the 'baby with the bath water.'

#### Paradigm Shift

The 'knowledge base' of teacher education in the shift from the traditional paradigm which I am suggesting in this paper includes a pre-college (PC), an academic (A), a professional-pre-service (PPS), and a professional development (PD) domain. Save for the first and last of these domains, the college/university serves as the locus for the preparation of teachers.

As a period of time over which the college/university can exert no direct impact, the PC domain nonetheless provides prospective teachers with the basic "stuff of culture, agency and identity formation and must be given preeminence in an emancipatory curriculum." (18) Prospective teachers do not come to the environment of higher education as 'empty vessels,' but rather with a substantial amount of subtle and powerful preconditioning which has generated deep ideological beliefs "about the nature of classroom teaching and school life." As Giroux stressed, "to ignore the ideological dimensions of students' experience is to deny the grounds upon which students learn and imagine." (19) Typically teachers preparation programs have done little to recognize and consider the implications for prospective teachers and learning environments caused by this realm of the knowledge base in the preparation of teachers.

Organized knowledge contained within the disciplines comprises the A domain of the knowledge base. Course work taken by prospective teachers in this domain

of their preparation typically entails 'liberal education,' 'general education,' and 'specialized education.' The traditional paradigm of preparation calls for a four-year curriculum with courses related to teacher preparation somehow interwoven within these years. This integration probably is the result of the difficult and extended transition for many colleges and universities from teachers colleges to multiversities. Though, another significant contributing force probably has been the limited number of faculty in many of the smaller institutions and hence the need to integrate the traditional preparation program with the A domain. Whatever the reason, however, continuing to attempt to integrate the PPS and A domains must no longer be pursued.

Further, for too long now we have been allotting too much time to the A domain of our teacher preparation programs. And more, with the recent advocacy of the four-year baccalaureate degree in the A domain by powerful reform groups prior to admission to a professional program of teacher preparation we are increasingly reifying our world views about the time necessary for this segment of preparation. This, in my judgment, is clearly wrong. It is necessary, in other words, that we commence reexamining the time block we have traditionally associated with undergraduate preparation in the A domain.

Tom stress the weaknesses to the liberal arts argument when he points out that "they provide no compelling rationale for requiring four full years of preparatory study in the liberal arts, supporting this recommendation only with the 'logic' that our complex society and the information <sup>EXPLORATION</sup> ~~exposition~~ demand longer educational preparation and with the 'experience' that becoming analytic and obtaining sophisticated knowledge of subjects takes time. (20) Clearly the argument that more and more liberal education is necessary to improve the quality of education in our schools misses the mark. There have been thousands of teachers who have acquired liberal arts degrees during the past three decades. Certainly these thousands of teachers provide us with a degree of evidence

about their quality as teachers. Recall, for instance, the number of teachers we recruited following passage of NDEA, with its great stress on math and science, or recall the liberal arts graduates who came out of the Peace Corps to enter the Teacher Corps. In few cases, if any, did these people outshine in any noticeable fashion the quality of teaching done by those who emanated from teacher preparation curricula.

Let us concede the argument of Hutchins, however, that "the aim of liberal education is human excellence, both private and public ... Its object is the excellence of man as man and man as citizen. It regards man as an end, not as a means; and it regards the ends of life and not the means to it. For this reason it is the education of free men." (21) Clearly we want teachers who understand what it is to be a full human being, and certainly this is a solid justification for a college education which stresses a base of learning in the liberal arts. But does this argument justify four years of time? I think not, and no less a contemporary of ours than Allan Bloom appears to concur when he points out that "... colleges do not have enough to teach their students to justify keeping them four years, probably not even three years." (22)

We need to elevate our consciousness about the time frame traditionally devoted to the A domain and work toward a paradigm (a) which reduces the amount of time which the A domain of the collegiate curriculum entails, and (b) which increases the amount of time available for the PPS domain. This does not mean, however, that we remain aloof from and disinterested in the A domain of the profession's knowledge base, as some writers have suggested (23). Instead we need to work with our arts and sciences colleagues to bring about the development of the liberal arts segment of the A domain which is based on a systematic examination of significant problems which have confronted humankind throughout its history, along with the ways in which recognized thinkers have thought about these problems. We need to insist that prospective teachers be exposed

to such problems as change, constitution, democracy, education, evolution, experience, habit, induction, judgment, knowledge, language, love, man, mind, memory, imagination, nature, philosophy, punishment, quality, quantity, reasoning, science, religion and truth. Teachers in preparation need to encounter the finest minds and understand how they have interpreted and addressed these sorts of problems. Our aim here should be the development of broad perspectives, of rich understandings, of a recognition of the perennial nature of human problems and the need to acquire the capacity to think about them in significant and potentially fruitful ways.

The general education segment of the A domain refers to the distribution of courses across the major domains of the arts and sciences disciplines, including the sciences, social sciences, humanities and fine arts, and to the need for prospective teachers at every level to have some acquaintance with the organizing concepts, the methodologies, the methods of thought, the major propositional knowledge and the emerging problems associated with *each* of these major domains. The purpose here should be to provide an opportunity for the prospective teacher to become a good judge of events in a broad array of disciplines, but not to create a specialist in any one of them.

Specialized education within the A domain refers to the study in depth of one of the disciplines of knowledge, OR to the study of four integrated disciplines derived from the four realms of knowledge alluded to above. Stress on specialization within a single discipline would characterize the preparation provided prospective teachers for grades five and above; the integrated disciplines would be pursued by those who desire to teach young children. I shall leave for another time suggestions about the nature of these integrated disciplines of study. Needless to say, however, they are based on a deep belief that the nature of the academic preparation we provide teachers of young children should be different in scope and depth from that provided teachers of older children.

For those who might be skeptical about the integrated disciplines for prospective teachers of young children it would be well to keep in mind the results of the summary of research by Ashton and Crocker who found that "the majority of studies failed to support the hypothesis that increasing teaching subject-area preparation requirements will improve students' performance."

(24)

Successful completion of the three dimensions of the A domain would earn a student a liberal arts degree. He or she would be ready at this point to take a state or national examination to assess his knowledge of a discipline, or, in the case of prospective teachers of young children, the integrated disciplines of study. A concomitant value here would be the information an institution would receive from such examinations about the quality of learning associated with the various disciplines.

Students enrolling in the PPS domain of the knowledge base would encounter three realms of understandings and skill development which would be under the direct control and supervision of the institution of higher education, EDUCOLOGY, PEDAGOGY, AND FIELD EXPERIENCE.

EDUCOLOGY (25) would entail such areas of study as the history, philosophy, psychology, economics, politics, sociology and anthropology of education, policy studies, analytical and normative thought, logic, neurological, biological and biochemical theory, brain research, statistics and tests and measurements, comparative education, curriculum theory, jurisprudence and the legislative aspects of education, theological understandings and ethical theory.

PEDAGOGY would entail such areas as strategies and techniques of teaching in the curricular arenas encountered in the lower schools, theories of teaching and instruction, including technologies of teaching as well as "... maieutic methods, role playing, ... social interaction and cooperation strategies," (26) classroom management, methods of working with parents, dealing with drop-outs

and students at risk, handling the child with special needs, individualizing work, and establishing cooperative learning groups. Pedagogy, in other words pertains to the gradual induction of the prospective teacher into classroom learning environments, initially by observing video, filmed, and audio classroom environments, followed by encounters with paper and pencil protocol materials, then by one-on-one situations in live teaching encounters, followed by micro-teaching experiences, all with video feedback and assessment by skilled clinicians. Problematic situations would be created for each of these pedagogical experiences which would enable the student to acquire increased understandings about the complexity of the teaching act. Stress would be as much on 'understanding' as on 'execution,' with the aim throughout the pedagogical domain to create a reflective teacher.

"Field" would entail the preparatory experiences provided prospective teachers in real classroom environments located in the larger society. Prospective teachers preparing for any level of classroom teaching would receive two eight week experiences in different schools under the tutelage of teachers who meet particularly significant and stringent intellectual and executive requirements.

Let me develop my thinking a bit more about two of the three segments of PPS. But first let me reiterate that the entire PPS domain of preparation would entail TWO YEARS OF TIME. This is necessary because during the past twenty-five years a veritable explosion of conceptual and skill knowledge related to schooling and to teaching has been emerging. While it is located in a vast number of sources, not clearly and carefully arranged for us, and for this reason probably not known by many teacher educators in any systematic way, this knowledge can, I believe, be appropriately categorized in the two broad categories employed in this paper, EDUCOLOGY and PEDAGOGY. Most of the recent studies about teacher reform, however, make mention only of the pedagogical aspects of teacher preparation, overlooking in large measure the wealth of insight and understanding to be derived from the educological domain.

### Educology

This domain of study would consume the entire first semester of PPS. It would be integrated with the pedagogical dimension during the second semester and would enter into the second year in the form of seminars in which students would critically assess their pedagogical experiences. This realm of study would be the realm we traditionally associate with the realm of 'foundational' studies. It is the component which Mathews might include in the "subjects fundamental to professional education..." (27) Baldwin gets at this notion a bit with her stress on "... core studies in teacher education oriented toward critiques of existing beliefs and practices ... (which) ... would provide for philosophical analysis of concepts such as human autonomy ... (which) ... would involve disciplines such as critical social theory, social psychology, communication theory, political theory, philosophy, social history, and the humanities." (28)

Examples of educological knowledge abound. Consider first the need for a teacher to know the history of the field of education. Anyone wishing to understand his realm of work clearly must study its history. I do not deny the fact that there are romantic-celebrationist views, institutional-milieu views and revisionist views of educational history. Despite these conflicting interpretations, by studying the history of our field prospective teachers can gain an appreciation for the fact that while new techniques and new approaches to teaching continuously emerge, in terms of matters of deep and lasting significance, things seem not to change all that frequently. History can provide us with the ability to make careful assessments in relation to traditional ways of knowing and doing, thereby enabling us to retain the good and sluff off the insignificant.

Or consider the sub-discipline of the philosophy of education with its questions about the nature of reality, of truth, of value. Who can deny the

significance of being able to ask and inquire into the sorts of responses these questions have generated and the deeper understandings of the nature of schooling and its classroom endeavors which are likely to result? How many times have we encountered school people employing such terms as 'philosophy' in their discourse, only to discover that what it was they were discoursing about was outside that realm of intellectual activity. Many tend to dismiss such study as irrelevant and yet it is most important in terms of its connection with the development of our theories of education, be they discipline-centered theories, child-centered theories, or societal-centered theories. Through the study of philosophy of education one gains insight into these theories in a manner which illuminates them far more sharply than is otherwise likely to occur.

One realm of philosophy of education brings the student into contact with analytical and normative methods of thinking. Analysis improves our capacity to discern the nuances of meaning in the terms we find being employed in education; the metaphors, the analogies, the allegories become clear and reveal different ways in which humans can be seen and different likely outcomes of schooling in relation to these ways of seeing. Terms such as profession, growth, problem, ends, process, value, take on a variety of senses of meaning depending upon the philosophical position one accepts. Without such knowledge one loses a degree of potential autonomy, compelled to accept the pre-judgments of others, compelled to accept ideological views not of his or her own choosing, compelled to accept a large measure of intellectual tyranny.

Normative thinking on the other hand enables us to learn how to ask appropriate questions about educational direction. Questions such as 'What ends ought we to pursue in our school encounters?', 'How can we justify these ends?', 'What values, political theory, religious persuasions, philosophic positions enter into our justification?', and 'What are the means we might be able to create to achieve our ends once they have been justified?', arise. I am continuously

amazed at how frequently I find school people engaged in discourse about normative matters and how infrequently I am able to elicit from them just what it is that is going on in this very important realm of the practical.

Much more could be said about each of the sub-disciplines within the educological domain. The main point I wish to stress, however, is the vast amount of systematized knowledge, what some would refer to as 'cognitive maps', which has emerged in the recent past and which must be acquired by prospective teachers if their ability to think reflectively about what it is they are doing is to be enhanced. Educological knowledge is the sort of knowledge which some writers have alluded to in the past as 'tacit' knowledge, that knowledge which becomes a part of our very being, which reduces the complexity of the world for the sake of handling the array of data we encounter in an economical fashion, and which enables us to generate this data when making our judgments about the problematic situations we encounter. It is knowledge which is vital to excellent teaching, though it is not directly applied to the teaching act.

Two committant values of a shift in our paradigm would be likely to result from renaming the foundations field, EDUCOLOGY. Educology could come to be considered a discipline within the frame of thinking of other liberal arts disciplines, comparable to biology, sociology, psychology, anthropology, with their respective sub-disciplines. Indeed, can there be any study within the arts and sciences more potentially liberating than the areas of study within the discipline of educology? It would be quite conceivable that some students uninterested in pursuing teaching as a career would become interested in selecting this discipline as a field ir. which to minor. Clearly, everyone has a stake in understanding the nature of schooling, and the discipline of educology with its many sub-disciplines within the PPS domain could easily attract many individuals over the course of time. Practically all the research and writing emanating from the reform movement, however, posit a position for teacher education which

perceives it in direct relation to its historical purpose, that of preparing persons to teach. None, to my knowledge, posit the POSSIBILITY that there is a domain of educational knowledge which is comparable to the other bodies of knowledge included within the liberal arts. This, it seems to me is b<sup>e</sup> very much in line with the thinking of Kneller who has argued vigorously for the recognition of education as a discipline in its own right, (29), and also with King who has suggested "this may mean that certain education courses (e.g., philosophy, history, sociology, or politics of education) count toward liberal arts graduation credit." (30)

A second concomitant value to be derived from the study of Educology would be the acquisition of professional knowledge which could be reasonably assessed by state and national boards. Assuming for the movement that board examinations are indeed an acceptable means for assessing candidates for teaching (admittedly a very arguable point), it is clear that such examinations could entail questions which cover the sub-disciplines within educology.

### Pedagogy

The pedagogical component is the broad curricular arena which would include the intellectual analysis and study of method for developing classroom instruction in each of the major subject-matter fields within the scope of our elementary and secondary schools. We might think of this segment of the PPS domain as its 'specialized' component.

Here, too, much knowledge abounds, though it is often found in disparate places, not easily accessible, and hence frequently not known to many in our work. Two research projects currently being pursued in the country offer examples of the sources from which such pedagogical knowledge might be drawn. These projects are the 'effective schools' and the 'effective teachers' projects. Let me cite examples of pedagogical knowledge emerging from these efforts. In terms of effective schools, we are becoming aware that schools are more

powerful than we have thought in shaping human behavior and achievement. We are becoming aware of the importance of professional collegiality in our schools, along with evidence which suggests that there is a higher degree of achievement in schools where there is present an orderly, safe environment, where there is a businesslike manner among the teachers and where school programs focus on achievement, hold students accountable for achievement and reward achievement. We know from this school based research that the seriousness and expressed purpose with which the school approaches its task affects the learning environment. And we are learning how important it is that schools be given much district-wide support, that they have a strong, knowledgeable and committed principal at the helm, and that clear notions among all students about what is expected of them will lead, in turn, to excellence of result.

In terms of effective teaching we know that students pay attention more when the teacher spends some of the class time discussing the goals or structures of the lesson and giving directions about what students are to do. We know that structuring affects attention and the capacity to learn well by each learner. We know something about time, and about pacing - the evidence suggests the power of pacing - the more a teacher covers, for instance, the more students seem to learn - though there is variability of a significant sort across classes. We know that the questions teachers ask affect the learning of their students; those who ask higher order questions, questions which require reasoned views, not simply emotive, feeling-oriented statements, and not simply a reliance on factual detail, will elicit higher achievement levels from students. We are learning too, that grouping, while it is a very rational response to the collective, often large class size, nature of classroom teaching, has clear effects on achievement - middle ability children tend to suffer some loss in achievement while low ability groups tend to show some gains when mixed with middle ability groups, and we know that the assignment of students to work

groups always tends to result in students in different groups learning quite different things in school.

The physical environment within which the pedagogical experiences ought to be encountered should consist of seminar rooms with conference tables seating 10-12 persons. Surrounding such space, or immediately adjacent to it, should be a number of enclosed cubicles, each large enough to accommodate 2-4 persons and a video recorder. Each cubicle should be constructed so that one of its walls has some one-way glass for observing purposes.

Without elaborating further on the pedagogical dimension of the PPS domain, we need to recognize that this is the component in which teaching activity commences and emerges in increasing complexity. This is the environment required by clinical instructors and off-campus supervisors to instruct and guide their students toward the level of instructional skill and excellence which will lead to superior work in their field experience.

Just as with the knowledge and skill derived from the educational component, the knowledge and skill derived from the pedagogical component of PPS could, if this were deemed appropriate or necessary, be assessed by state and national board examinations.

#### Field Experience

The final component of the PPS domain, field experience, should be of utmost concern to everyone connected with the professional program. Often cited by prospective teachers as their most important preparatory experience, it may be the one dimension of preparation that is in most need of careful development. At least that is the view of a number of thinkers who have devoted much attention to this dimension of teacher preparation. Evertson et. al. indicate "that the classroom experiences of student teachers and that of first-year teachers, as it is currently carried out, may be noneducative at best and miseducative at worst." (31) Lanier and Little (32) and Berliner (33) concur with this belief.

In spite of these reservations, however, prospective teachers do have to practice in typical classroom environments, hence it behooves us to keep in mind those responsibilities related to the campus, and those related to the school.

Two dimensions of the campus realm require consideration. One is the identification of schools within which the field experience can be obtained. Years ago we relied somewhat on campus-based laboratory schools. Holmes suggests the need for professional development schools. Whatever the name, wherever located, we should be clearly aware of the fact that all schools are NOT appropriate institutions for the preparation of prospective teachers, any more than all hospitals are appropriate situations for the preparation of prospective medical personnel. Our State Departments of Education could perform a valuable service for teacher preparation if they would assume the responsibility of developing criteria which could be used to identify suitable school environments for the field experience.

The second dimension of the field experience requires the college to offer renumeration, faculty rank as an adjunct faculty member, and professional rights to all school-based faculty working with students during their semester of student teaching. Those accepting such responsibilities should be among the very best instructors, the lead teachers, and not among the beginning instructors in the schools.

The field experience poses very real problems in relation to school administrators and union representatives, requiring a large measure of statesmanship by college and university personnel if problems are to be mitigated and resolved satisfactorily. Given the views of leading thinkers about the efficacy of student teaching in bringing about the development of critically thoughtful teachers, however, the significance of this component of PPS must not be overlooked.

### Professional Development (PD)

This domain of the knowledge base entails the induction year and the continuing education of teachers throughout their careers. The induction year refers to the initial year of full-time teaching by a new teacher, one in which his or her work would be under the careful direction of a mentor, a senior, highly competent faculty member, who would oversee and advise the young professional. I shall say nothing more about this component except that I am in accord with the thinking of Reitman that after a "mutually-agreed upon point has been reached, let the by-now reasonably confident new teacher or intern alone on his own for awhile to further refine his art by himself; but, see to it that mentors continue to be available to provide advice and help when and only when specifically called upon for assistance." (34)

### Recommendations and Conclusion

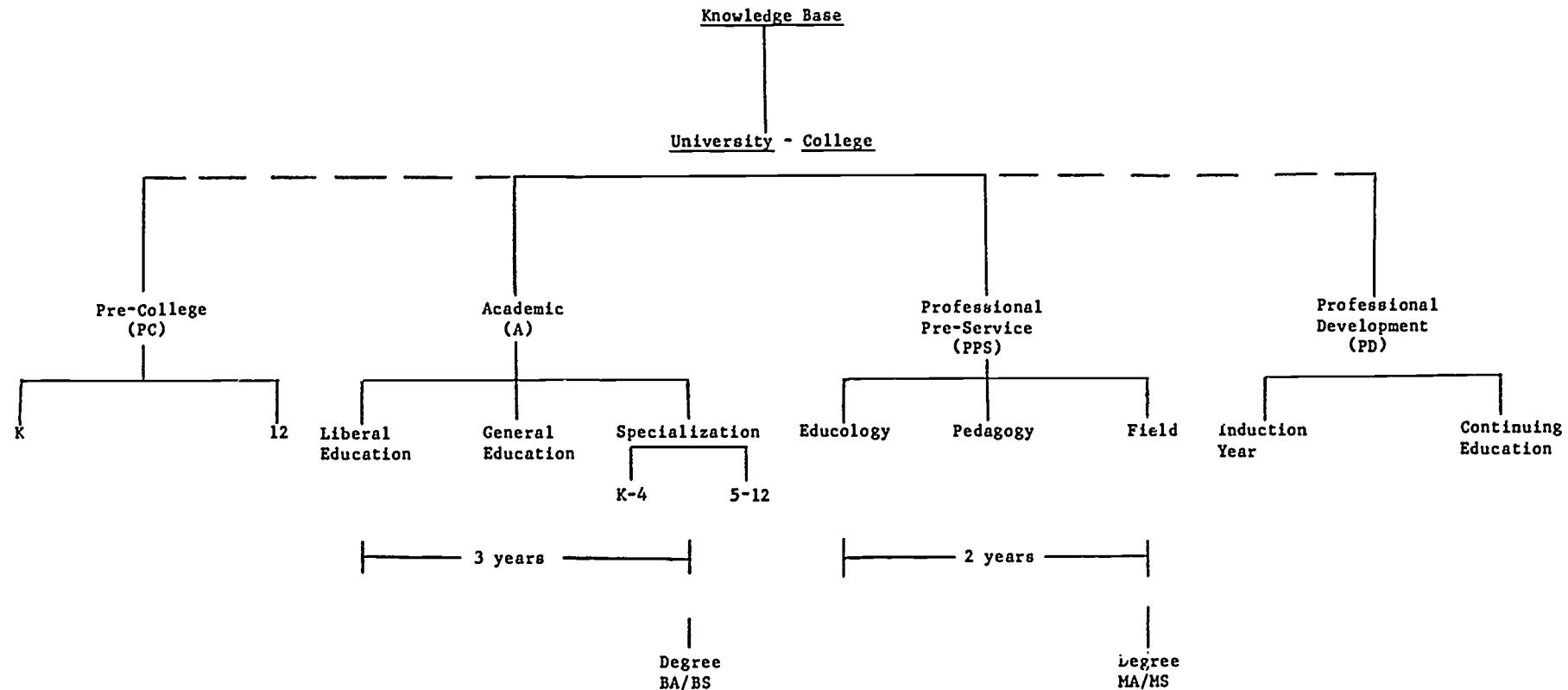
I have constructed this paper in light of the theme on which the 1987 Annual Conference of AESA has been based: "The Future of the Foundations: Necessities and Possibilities." I am not sanguine enough to believe that all, or even much, that has been suggested in it will meet with approval and support, given the complexity of variation of thought within our common endeavors. Nor am I unaware of how threatened some in the foundations appear to feel regarding the long-term future of the foundations. Still, I do perceive very real POSSIBILITIES for our discipline. These possibilities may best be realized by our identifying a limited number of specific aims which can be used to guide our endeavors. Let me mention two such aims: (1) We need to develop syllabi and course outlines for the sub-disciplines comprising the domain of EDUCOLOGY. These could be developed by committees derived from the membership in such organizations as AESA, AERA, PES, and other relevant groups. The important task to be accomplished would be the creation of a solid, defensible array of syllabi, supported by extensive bibliographies, to aid in justifying our claim for the need to create

a legitimate new discipline on our college and university campuses. Achieving this aim will not be easy in any case; any hope of accomplishing it rests on the quality of work in the development of such syllabi, along with the construction of arguments for including particular sub-disciplines within educology. We have nothing whatever to be ashamed of in the sub-disciplines of educology. It remains for us to bring these disciplines together, organize them within the framework of the discipline of educology, and strive to achieve their recognition as a liberal discipline which would be every bit as significant a discipline as any of the other liberal studies; (2) We need to create a committee which will commence immediately to examine the 'professional' knowledge component of the various forms of the National Teacher Examination. This committee should also be requested to monitor the efforts by states and agencies to create Board examinations for prospective teachers.

Here I am pointing not only to the NTE, the professional component of which is an inadequate test of foundational knowledge but also, and in some ways more forcefully, toward the efforts currently being generated by the National Board for Professional Teaching Standards, the 63-member national Carnegie Board. Creation of the Board was a cornerstone of the Carnegie Forum's 1986 Report on restructuring our schools. This "National Board will," according to Albert Shanker, "develop a certification process to recognize and promote high-quality teaching." (35)

I am concerned about this Board for two reasons: (1) the apparent effort to create examinations in the various disciplines on the assumption that every prospective teacher will have to complete a major in a discipline. As I indicated earlier in this paper, requiring a major in a discipline for teachers of children in pre-K through grade four is inimical to what we know about how children grow and mature, and it is not compatible with elementary school classroom environments as we envision them; (2) the stress in all of the reform reports

has been largely on pedagogical skill in the improvement of schooling, with little or no attention to the need for teachers to acquire that 'tacit' background of understanding which enables them to engage in disciplined thinking and reflective decision-making in the realm of practice. We need to be clearly aware of the fact that pedagogy may become the only dimension of study considered for assessment by the Board, an eventuality which, if it came to be, would certainly reduce the importance of that body of knowledge which I have argued in this paper constitutes the discipline of Educology, a body of knowledge every bit as important a liberal art as the older arts and sciences, both to the development of liberally educated people in the sense of Hutchins alluded to earlier and to school people in particular.



REFERENCES

1. Lanier, J. E. & Little, J. W. (1986). "Research on teacher education." In M. C. Wittrock (Ed.), Handbook of research on teaching (3rd edition), New York: Macmillan, 549.
2. Holmes Group. (1986). Tomorrow's teachers: A report of the Holmes Group. East Lansing, MI: Holmes Group, 49-50.
3. "The closing of the American mind." (1987, Oct.) Readers Digest, An Editorial Review, 81-84.
4. Holmes Group, op. cit., 51.
5. Freiberg, H. J. (1987). "Career ladders: Messages gleaned from experience," Journal of Teacher Education. 38(4), 49-56.
6. One report which seems to have been quite influential in the merit pay movement was issued in October, 1983 with the title, Merit Pay Task Force Report, Carl D. Perkins, Chairman of the Committee on Education and Labor, House of Representatives, 98th Congress, 1st Session, Report No. 98, Washington, DC: U.S. Government Printing Office.
7. Lawrence, D. & Scott, R. L. (1985, revised June). The Toledo plan-Intern, intervention, evaluation. (Formerly, The Toledo plan-Supervision, evalution, goal setting). 37 pp.
8. In 1985 the State of New York adopted Excellence in Teaching legislation which created a sum of tax money just shy of \$100,000 to be allocated to teachers across the state if their bargaining agents and governing boards of education requested it. Money granted to local school districts under this program was to be made a permanent part of each teacher's salary. This legislation has not been without its strong opponents. For instance, Murray Schneider, president of the New York State Federation of School Administrators testified during the September 11, 1987 Regent's Legislative Conference in Albany that the "EIT legislation was 'denegrating' and 'degrading' administrators and supervisors because they were not eligible for this salary supplementation." New York Teacher. (1987,

9. City of Rochester, New York, as reported in New York Teacher. (1987, Oct. 12). 11.
10. Hobart, T. Y. (1987, Oct. 12). "Teacher empowerment - not a question of turf." New York Teacher. 10.
11. Holmes Group, op. cit.; & Carnegie Forum on Education and the Economy, (1986). "A nation prepared: Teachers for the 21st century." New York: Carnegie Corporation.
12. Carnegie Report, p. 55.
13. Schlechty, P. C. (1985). "A framework for evaluating induction into teaching." Journal of Teacher Education. 36(1), 37-41.
14. Toch, T. (1983, December). "State chiefs seek end to education school requirements for teachers." Education Week, 1,23.
15. Remark made to writer during the Twelfth Annual Conference of the Society of Educators and Scholars, Eastern Illinois University, Charleston, Illinois, October 2-3, 1987.
16. Southern Regional Education Board. (1984, April). "Certify arts and sciences graduates to teach." Atlanta: Southern Regional Education Board.
17. McCaleb, J. L., Borko, H. A., Arends, R. A., Garner, R. and Mauro, L. (1987, July-August). "Innovation in teacher education: the evolution of a program." Journal of Teacher Education, 38, (4), 57-64.
18. Giroux, H. A., and McLaren, P. (1986). "Teacher education and the politics of engagement: The case for democratic schooling." Harvard Education Review, 56(3), 213-238.
19. Idib., 234.
20. Tom, A. R. (1986, July-August). "The Holmes Report: Sophisticated analysis, simplistic solutions." Journal of Teacher Education, 44.
21. Hutchins, R. M. (1952). The great conversation - The substance of a liberal education. Chicago, IL: Encyclopedia Britannica, Inc., 3.

22. Bloom, op. cit.
23. Gore, J. (1987, Jan.-Feb.). "Liberal and professional education: Keep them separate." Journal of Teacher education, 38(1), 2-5.
24. Ashton, P. and Crocker, L. (1987). "Systematic study of planned variations: The essential focus of teacher education reform." Journal of Teacher Education, 38(3), 2-8.
25. I am indebted to Christensen, J. E. & Fischer, J. E. (1979) Analytic philosophy of education as a sub-discipline of educology: An introduction to its techniques and application. Washington, DC: University Press of America, for introducing me to the concept of 'educology' which they "... take to be the discipline which is used to study any and all aspects of the educational process. Thus, educology as a discipline includes," according to these writers, "the sub-disciplines of praxiology of education (including the technology of education), the science of education (including the psychology, sociology, economics, anthropology, political science of education, and all other scientific studies about the educational process, the normative philosophy of education, the jurisprudence of education, the history of education and the analytic philosophy of education." p. v.
26. Holmes Group, op. cit., 52.
27. Mathews, Walter M. (1986, Spring). "Perspectives on the deanship." Journal of AACTE/NYS, v. 2, 11-15.
28. Baldwin, Edith E. (1987, Jan.-Feb.). "Theory vs. ideology in the practice of teacher education." Journal of Teacher Education, 38(1), 16-19.
29. Kneller, G. F. (1983). "The proper study of education." Keynote address, Annual Meeting of the American Educational Studies Association," Milwaukee, WI: 3 November 1983.

30. King, J. A. (1987, Jan.-Feb.). "The uneasy relationship between teacher education and the liberal arts and sciences." Journal of Teacher Education, 6-10.
31. Everston, C., Hawley, C., & Zlontnik, M. (1984). "The characteristics of effective teacher preparation programs: A review of research." Unpublished manuscript. Peabody College of Vanderbilt University, Nashville.
32. Lanier and Little, op. cit., 565.
33. Berliner, David. (1985, Feb. 5). "Research on teaching and its implications for teacher education." Invitational Conference on 'What Teachers Should Know,' State University of New York at Buffalo, Amherst, New York.'
34. Reitman, S. W. (1986). "A preliminary model of pre-service teacher education as the preparation of professional artists." A paper presented at the 1986 conference of the American Educational Studies Association, October 29 - November 2, Pittsburgh, PA. (mimeograph)
35. The Bottom Line. (1987, Oct. 23). "National standards board ready for work." Newsletter, New York State United Teachers, (6), 5, 4.